

Date: Tuesday, 24/02/2009 8:00:10 AM  
 User: Jean-Luc Menard

## Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : STEM
Job Number : 46041	
Estimate Number : 10857	
P.O. Number :	Part Number : D34073
This Issue : 24/02/2009 S.O. No. :	Drawing Number : D3407 REV E
Prsht Rev. : NC	Project Number : N/A
First Issue : / / Type : MACHINED PARTS	Drawing Revision : E
Previous Run : 44201	Material :
Written By : <u>JS 09.02.24</u>	Due Date : 03/03/2009 Qty: 12 Um: Each
Checked & Approved By :	
Comment : Est Rev:A 05.10.18 New issue KJ/EC	
Est Rev:B Now on Doosan 08-05-14 JLM Verified By:DD	
Est Rev:C 08-08-12 revE as per dwg (ecn 08-507) DD verified by:EC	

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	M174R0750	17-4 round bar .750
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Comment: Qty.: 0.3843 f(s)/Unit Total : 4.6116 f(s)  
 Material: 17-4ph SS Round Bar Ø0.750(M17-4-R0.750)  
 Identify for D3407-3  
 Batch: M110777

JS 09/02/24

2.0	DOOSAN LATHE	DOOSAN LATHE
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Comment: DOOSAN CNC LATHE

1-Turn as per Folio FA597 Rev: 1/0 & Dwg D3407 Rev: E

2-Deburr

JS 09/02/24

3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
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Comment: INSPECT PARTS AS THEY COME OFF MACHINE

JS 09/02/24

4.0	QC8	SECOND CHECK
-----	-----	--------------



Comment: SECOND CHECK

JS 09/02/27 (12)

5.0	PACKAGING 1	PACKAGING RESOURCE #1
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Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: ERIC L.

JS 09/02/27 (12)

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: STEM

Job Number: 46041

Part Number: D34073

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC21

FINAL INSPECTION/W/O RELEASE



09/03/02 *[Signature]*

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



*mf*  
09-02-27

<b>DART AEROSPACE LTD</b>		<b>Work Order:</b>	46041
<b>Description: Stem</b>		<b>Part Number:</b>	D3407-3
<b>Inspection Dwg: D3407</b>		<b>Rev: E</b>	<b>Page 1 of 1</b>

### FIRST ARTICLE INSPECTION CHECKLIST

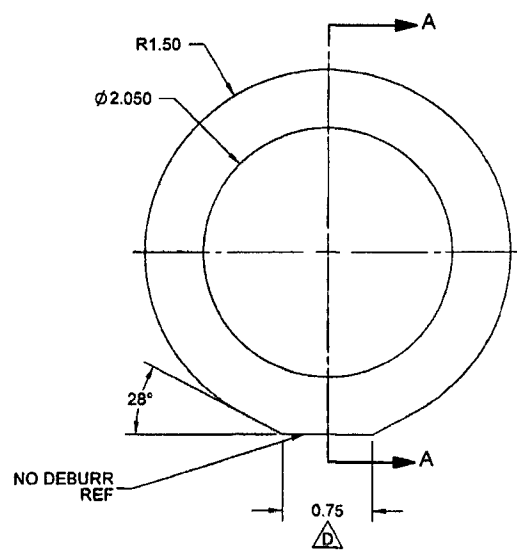
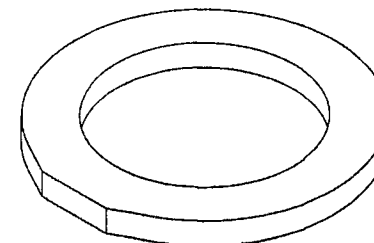
☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.063	+/-0.010	.063				
1/4-28 UNF	Max: 0.2668 Min: 0.2635	.266				
Major Ø	Max: 0.249 Min: 0.2425	.247				
Ø0.625	+/-0.010	.625				
Ø0.363	+/-0.010	.363				
Ø0.750	+/-0.010	.750				
R0.100	+/-0.010	R.100				
0.470	+/-0.010	.470				
0.250	+/-0.010	.250				
2.555	+/-0.010	2.555				
3.305	+0.000/-0.010	3.305				
4.325	+/-0.010	4.325				
0.150	+/-0.010	.150				
0.550	+/-0.010	.550				
0.625	+/-0.010	.625				
0.250	+0.010/-0.000	.250				

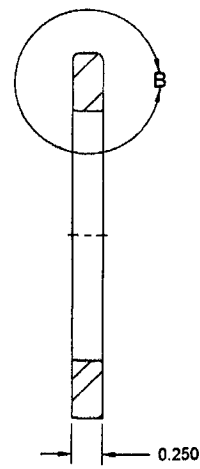
<b>Measured by:</b>	RP	<b>Audited by:</b>	SP	<b>Prototype Approval:</b>	N/A
<b>Date:</b>	07/02/26	<b>Date:</b>	09/02/27	<b>Date:</b>	N/A

Rev	Date	Change	Revised by	Approved
A	06.11.08	New Issue	KJ/JLM	
B	07.09.26	Tolerances revised	KJ/EC	
C	08.05.14	Dimensions updated per Dwg Rev D	KJ/JLM	
D	08.10.07	Dimensions updated per Dwg Rev E	KJ/DD	

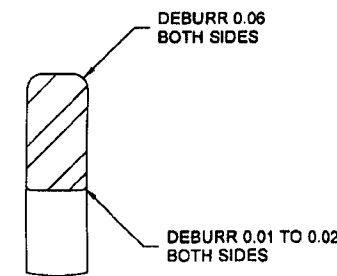
w/o 46041



**D3407-5 RING**



**SECTION A-A**

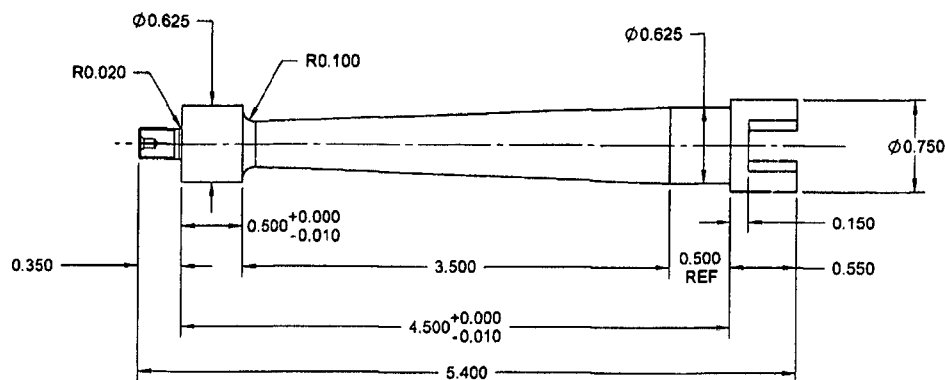
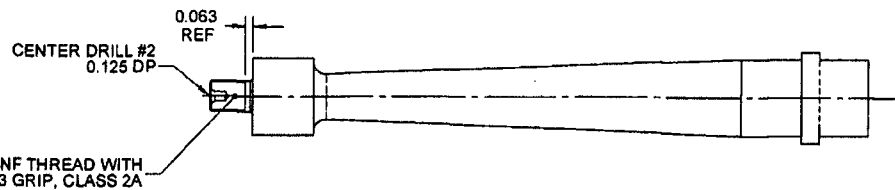


**DETAIL B  
SCALE 2X**

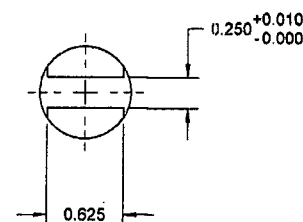
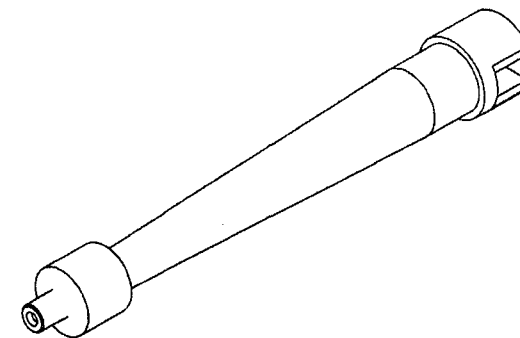
**RELEASED**  
01-03-01/11

- NOTES:**
- 1) MATERIAL: 17-4 PH SS BAR PER AMS 5604/5643 (REF. DART SPEC M17-4-B)
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: N/A
  - 6) IDENTIFICATION: N/A
  - 7) WEIGHT: 0.27 lbs

DESIGN	47	<b>DART AEROSPACE USA, INC.</b>	
DRAWN	1/8	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. E
MFG. APPR.		D3407	SHEET 4 OF 5
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**D3407-7 STEM**

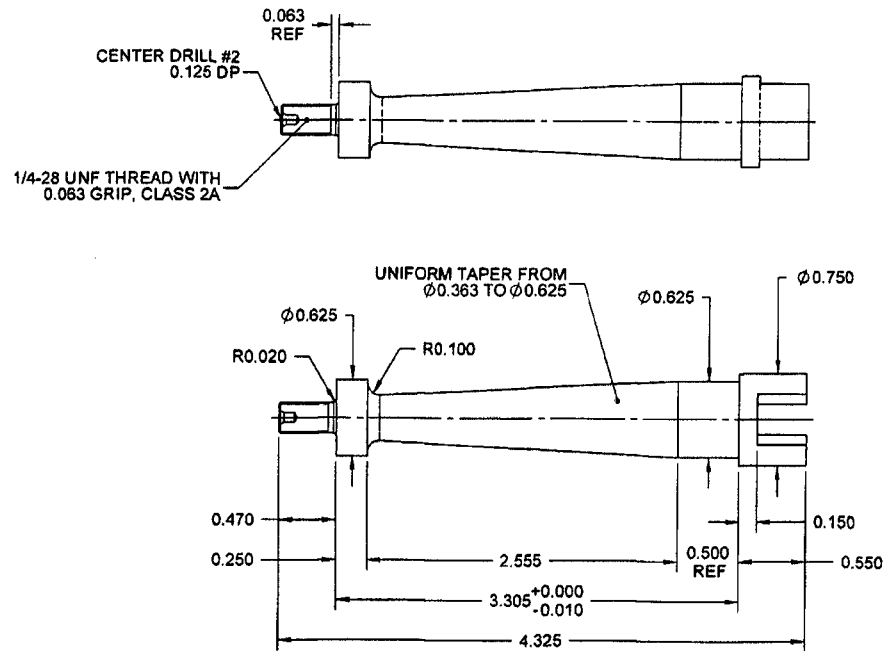


*w/o 46041*

**RELEASED**

- NOTES:**
- 1) MATERIAL: 17-4 PH SS ROUND BAR PER AMS 5643 (REF. DART SPEC M17-4-R)
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: MACHINE ALL INSIDE EDGES WITH A 0.010 RADIUS
  - 6) IDENTIFICATION: N/A
  - 7) WEIGHT: 0.34 lbs

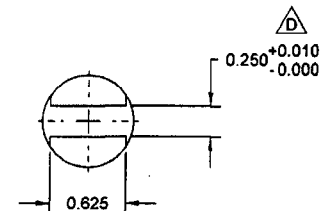
DESIGN	AJS	<b>DART AEROSPACE USA, INC.</b>	
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**D3407-3 STEM**

**NOTES:**

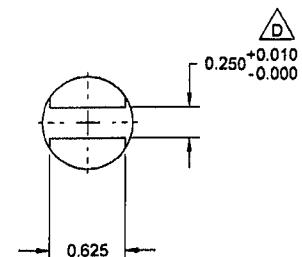
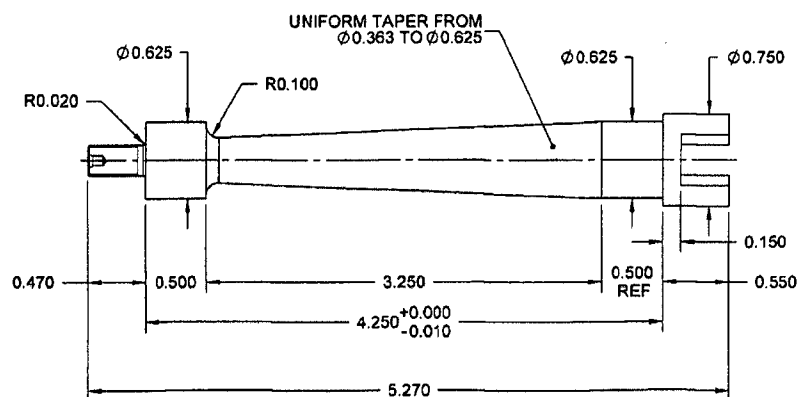
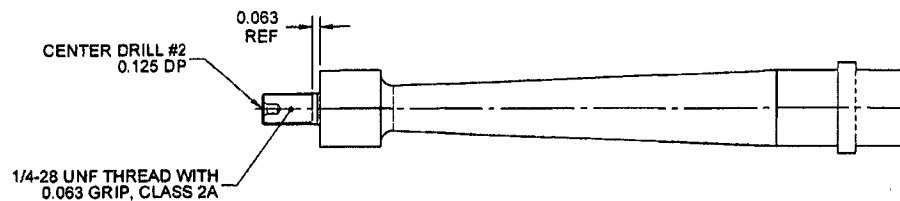
- 1) MATERIAL: 17-4 PH SS ROUND BAR PER AMS 5643 (REF. DART SPEC M17-4-R)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: MACHINE ALL INSIDE EDGES WITH A 0.010 RADIUS
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.27 lbs



*w/o 46041*

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w/o 46041

**D3407-1 STEM**

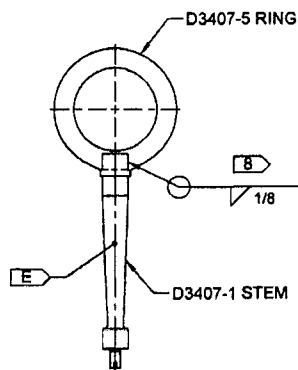
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08-07-23

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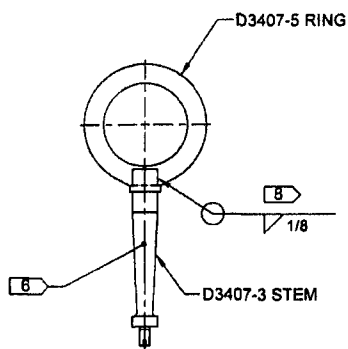
- 1) MATERIAL: 17-4 PH SS ROUND BAR PER AMS 5643 (REF. DART SPEC M17-4-R)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: MACHINE ALL INSIDE EDGES WITH A 0.010 RADIUS
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.33 lbs

DESIGN		<b>DART AEROSPACE USA, INC.</b>	
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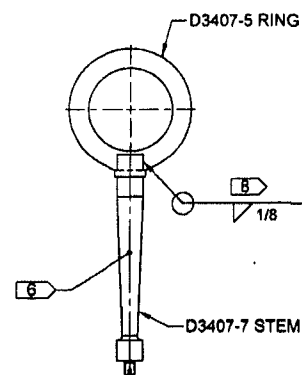
QTY -041	QTY -043	QTY -045	PART NUMBER	DESCRIPTION
X			D3407-041	TOW RING
	X		D3407-043	TOW RING
		X	D3407-045	TOW RING
1			D3407-1	STEM
	1		D3407-3	STEM
1	1	1	D3407-5	RING
		1	D3407-7	STEM



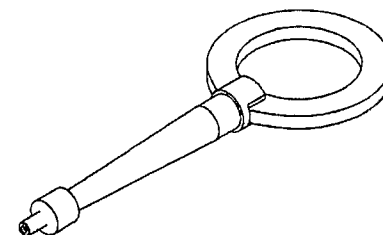
**D3407-041 TOW RING**



**D3407-043 TOW RING**



**D3407-045 TOW RING**



**RELEASED**

**NOTES:**

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3 (EXCEPT THREADS)
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3407-XXX" USING BLACK FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: D3407-041 - 0.60 lbs, D3407-043 - 0.53 lbs, D3407-045 - 0.81 lbs
- 8) WELD PER DART QSI 004 ON ALL EDGES BETWEEN STEM AND RING

DESIGN	ADD D3407-045 (ZN B2-1, D8-1); ADD D3407-7 (ZN B6-5); REVISED NOTE 8 TO ADD IDENTIFICATION (ZN A5-1); REASON: PRODUCTION FACILITY	PH	08.07.23
D	D3407-1/3 SLOT WAS ROUND NOW FLAT FOR ASSEMBLY WITH D3407-5 (ZN C2-2, C2-3); D3407-5 WAS ROUND NOW FLAT ON ONE END FOR ASSEMBLY WITH D3407-1/3 (ZN B6-4); REASON: PRODUCTION FACILITY	PH	08.04.07
C	-1/3 LONGER FOR FIT W/WASHER	CP	05.09.09
B	UPDATE DIAMETER, THREAD CLASS ADDED	CP	05.08.17
A	NEW ISSUE	CP	05.03.18
REV.	DESCRIPTION	BY	DATE
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	08.07.23		

**DART AEROSPACE USA, INC.**  
PORT HADLOCK, WA

DRAWING NO.  
**D3407**  
REV. E  
SHEET 1 OF 5  
TITLE  
**TOW RING**  
SCALE  
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